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10/579,732	12/05/2006	Masugi Inoue	4035-0179PUS1	8874

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EXAMINER
DEAN, JR, JOSEPH E

ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
03/18/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>04 December 2008</u>.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-6</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-6</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   Examiner accepts amended claims 1 and 2.

Response to Arguments

2.   Applicant's arguments filed 12/04/08 have been fully considered but they are not

persuasive. The rejection of Tsirtsis, Ohtani and Hamasaki address claimed subject

matter, therefore claims 1-6 will remain rejected as described below.

3.   The applicant argues/ per Tsirtsis reference that both the mobility agent module

202 and the session signaling server module 204 fails to disclose that one of the two is

specifically designed for session establishment and maintenance and the other is for

data communication other than session establishment and maintenance (Remarks/

Page 9).

4.   In response, the examiner respectfully agrees in part that Tsirtsis does not

designate only one function for each module. However, Tsirtsis established that the

module 204 support session initiation operations, establishing data communication

session, and sending subsequent signals as required, also support session

maintenance services and terminations. Module 202 allows access node 200 to support

end node mobility and connectivity management services, module 202 also may include

sub modules to support a number of functions such as improve performance of handoffs

and minimize service disruptions, as well as supporting node 200 on session

establishment and maintenance service to end nodes. Therefore, Module 202 and

Module 204 provides more than one function, the essential function such as **signaling**

and data communication as well as other functions which does not take away from overall inventive concept. The examiner has not identified any place in Tsirtsis reference where it states that all features are performed simultaneously per module. Therefore Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited. Further, they do not show how the amendments avoid such references.

 As for executing data communications other than signaling communications between the basic access network client processing unit and the basic access network server processing unit (column 8, lines 9-14, **i.e. state information module 210 includes communication session, security information or communication with access node or another device**)

5.   The applicant argues that secondary references Ohtani and Hamasaki only discloses certain aspects of the invention but fail to disclose the combination of elements set forth in the amended independent claim 1 (Remarks/ Page 10).

6.   In response to applicant's argument that each individual reference fail to disclose the combination of elements, the test for obviousness is not whether the features of a secondary references may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made

8.   Claims 1, 2, and 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Tsirtsis (US 6,954,442) in view of Ohtani (US20030157936A1) (hereinafter

Ohtani).

        Per claim 1, Tsirtsis discloses a wireless communications system which uses at

least two kinds of wireless communication networks, enables simultaneously to connect

to a basic access network for executing signaling communication <u>only</u> in which

communication is controlled so as to be continuously switched (Abstract) and to a

wireless access network for executing data communications (col. 8 lines 9-14) <u>only</u>

other than the signaling communication and comprises wireless communication

terminals and a wireless communication server, <u>wherein</u>:

        each of the wireless communication terminals comprises a seamless application

processing unit for executing connection processing to the basic access network and

connection/disconnection processing to and from the wireless access network (Abstract;

col. 8 lines 49-55, i.e. end node moves between domains (fairly characterized as the

two kinds of networks) and end node changes its point of connection from an access

node to another), a basic access network client processing unit having a client function

in the signaling communication (Abstract and col. 8 lines 57-60), a multicast

communication node application processing unit for setting multicast reception using at least the two kinds of the wireless communication networks (col. 6 lines 44-47 & 50-52, broadcast feature –the novel session signaling message includes multiple end node session identifiers) , and respective network devices corresponding to the respective wireless communication networks (col. 7 lines 50-53); and

the wireless communication server comprises a home agent application processing unit for setting a multicast transmission using at least the two kinds of the wireless communication networks (col. 6 lines 22-31), and for managing the signaling communication for communicating the status of the respective wireless communication terminals there between(col. 7 lines 14-18)

and for managing the registration/update processing of the respective wireless communication terminals (col. 16, lines 54-66), a terminal status table for managing the status of the respective wireless communication terminals (col. 7, line 66 through col. 8 line 13 and col. 19-31, tables 1-11), a terminal configuration table for managing wireless communication network interfaces implemented in the respective wireless communication terminals (col. 7, line 66 through col.8 line 13 col. 19-31, table 1-11),

and the seamless application processing unit of each of the wireless communication terminals individually connects the basic access network for control of executing signaling communication only (col.7 lines 53-57 Fig 2 and 3, **i.e. via access node to communication device-refer to response to argument section as it relates to features not working simultaneous**) and the wireless access network for executing data communications only other than the signaling communication between the basic

access network client processing unit and the basic access network server processing
unit **(col.8 lines 9-13, Fig 2 and 8, i.e. refer to response to arguments section, state**
module 210).

Tsirtsis does not disclose a basic access network server processing unit for
notifying, when the wireless communication networks are continuously switched, the
wireless communication terminals of a wireless communication network acting as a
switching candidate, and a preference setting table for managing the order of the
wireless communication networks acting as switching candidates when the wireless
communication networks are continuously switched.

However, Ohtani discloses et al. discloses a basic access network server
processing unit for notifying, when the wireless communication networks are
continuously switched (page 2 paragraphs 0006, 0014, 0031-0032), the wireless
communication terminals of a wireless communication network acting as a switching
candidate (page 2 paragraphs 0006, 0014, 0031-0032), and a preference setting table
for managing the order of the wireless communication networks acting as switching
candidates when the wireless communication networks are continuously switched (page
5 paragraphs 0031-0032, 0077).

Therefore , taking the combined teachings of Tsirtsis and Ohtani as a whole, it
would have been obvious to one of ordinary skill in this art at the time of invention by
Applicant to incorporate the above listed items by Tsirtsis where a basic access network
server processing unit for notifying, when the wireless communication networks are
continuously switched the wireless communication terminals of a wireless

communication network acting as a switching candidate and a preference setting table

for managing the order of the wireless communication networks acting as switching

candidates when the wireless communication networks are continuously switched

suggested by Ohtani for the advantages of alerting networks of being switched and

managing the order and sequence thereof.

Per claim 2, in the obvious combination, Tsirtsis discloses the wireless

communications system <u>wherein</u>:

the wireless communication server comprises two servers (col. 6 lines 52-57) of,

a home agent server comprising the home agent application processing unit and the

basic access network server processing unit (col. 2 lines 42-45), and

a resource server comprising the terminal status table, the terminal configuration

table (col. 7 lines 66-67 , col. 8 lines 1-13 & table 1-11 i.e. session signaling server

access resource and state information); and

the basic access network server processing unit obtains or registers the

information in the respective tables of the resource server through a wired or wireless

communication network (col. 8 lines 1-13 & table 1-11).

In addition, in the obvious combination, Ohtani discloses the preference setting table

(paragraph 0077, Fig 4a).

Therefore, taking the combined teachings of Tsirtsis and Ohtani as a whole, it

would have been obvious to one of ordinary skill in this art at the time of invention by

Applicant to incorporate a preference setting table suggested by Ohtani for the advantages of listing out and providing order to the sequence of events.

Per claim 5, in the obvious combination, Tsirtsis discloses wherein when a user instructs to switch the wireless access network or the basic access network in the wireless communication terminal (col. 2 lines 3-20), after the seamless application processing unit notifies the multicast communication node application processing unit of switching of communication to the basic access network (col. 6 lines 48-57), the seamless application processing unit executes processing for changing network connection from the current wireless access network or basic access network to a specified wireless access network or basic access network (Col. 6 lines 48-57).

Per claim 6, in the obvious combination, Tsirtsis discloses wherein the terminal status table provides information relating to at least the identification symbols of the wireless communication terminals, the basic access network in use, the wireless access network in use, and a multicast communication status (refer to Table 1-11, message content and state information).

9.   Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsirtsis (US 6,954,442) and Ohtani (US20030157936A1) as applied to claims 1 or 2 above, and further in view of Hamasaki et al.US2004/0137901.

Per claim 3, as claimed in any one of claims 1 and 2, in the obvious combination discloses, Ohtani discloses wireless communication system wherein the seamless application processing unit of the wireless communication terminal executes connection processing to the basic access network (paragraph 0041, i.e. in which a mobile station

detects one or more addition branch candidates constituting handover candidates in

communications between the mobile station and a base station connected to the mobile

station, and notifies a switching center connected to the base station of the addition

branch candidates), the seamless application processing unit executes processing for

sequentially trying to connect to a next candidate network (Abstract). Tsirtsis and Ohtani

does not disclose, the seamless application processing unit tries to connect to the

network with reference to basic access network candidate information that in advance

records the wireless communication networks used as a candidate for the basic access

network as well as when the network cannot be connected.

However, Hamasaki discloses wireless communication system wherein the

seamless application processing unit tries to connect to the network with reference to

basic access network candidate information that in advance records (page 2, paragraph

0016, i.e. the processor predicts when the MT will move to an area covered by the

WLAN and based on the prediction, the processor pre-registers the MT with the WLAN

so that when the MT enters the WLAN covered area), the wireless communication

networks used as a candidate for the basic access network as well as when the network

cannot be connected (page 1 paragraph 0006).

Therefore taking the combined teachings of Tsirtsis ,Ohtani and Hamasaki as a

whole, it would have been obvious to one of ordinary skill in this art at the time of

invention by Applicant to implement seamless application processing unit of the

wireless communication terminal executes connection processing to the basic access

network, seamless application processing unit executes processing for sequentially

trying to connect to a next candidate networks wireless communication system by

Ohtani and the seamless application processing unit tries to connect to the network with

reference to basic access network candidate information that in advance records the

wireless communication networks used as a candidate for the basic access network as

well as when the network cannot be connected suggested by Hamasaki for the

advantages of sending advance data to focus area with proper connectivity.

Per claim 4, in the obvious combination, Ohtani discloses the wireless

communications system wherein when the network device of a wireless communication

detects abnormal communication (paragraph 0088) of the wireless access network,

after the seamless application processing unit notifies the multicast communication

node processing application unit of switching of communication to the basic access

network and then switches the communication (refer to explanation in claim 1), the

seamless application processing unit tries to connect to a wireless access network

acting as a next candidate (refer to explanation in claim 1) with reference to wireless

access network candidate information that in advance records the candidates of

wireless communication networks used as the wireless access network as well as when

the network cannot be connected (refer to explanation in claim 3), the seamless

application processing unit executes processing for sequentially trying to do network

connection to a next candidate in the condition that the wireless access network is not

the same as the basic access network and the basic access network is connected (refer

to explanation in claim 3).

Therefore, taking the combined teachings of Tsirtsis, Ohtani and Hamasaki as a whole, it would have been obvious to one of ordinary skill in this art of the time of invention by Applicant to incorporate the network device of a wireless communication terminal detects abnormal communication of the wireless access network suggested by Ohtani for the advantages of detecting errors at various network element levels to improve overall efficiency.

Conclusion

10.   Due to the references sited in the original Office Action still apply in the second Office Action; therefore **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH DEAN, JR whose telephone number is

(571)270-7116. The examiner can normally be reached on Monday through Friday

7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Corsaro Nick can be reached on 571-272-7876. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

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Examiner, Art Unit 2617

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